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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,826	01/21/2004	Stephen J. Todd	E0295.70200US00	4078

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WOLF GREENFIELD & SACKS, PC  
FEDERAL RESERVE PLAZA  
600 ATLANTIC AVENUE  
BOSTON, MA 02210-2206

EXAMINER
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DARE, RYAN A

ART UNIT	PAPER NUMBER
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2186

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/761,826	TODD ET AL.	
	Examiner	Art Unit	
	Ryan Dare	2186	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on interview on 10/03/06.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

1. As a result of the Examiner's interview with Applicant on 10/03/06, the examiner is withdrawing the rejection under Hochberg and the finality of the last office Action. A new search was performed and a new rejection under 35 U.S.C. 102(e) is made below.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Margolus et al., US PG Pub 2004/0167898.

4. With respect to claim 1, Margolus et al. teach **a method of processing data in a computer system comprising at least one host and at least one storage system, the method comprising acts of:**

**(A) sending to the at least one storage system, from the at least one host, a request to store a unit of data, the request including the retention period for the unit of data,** in par. 108 which describes fig. 3. The objects a, b, c and d are stored at time t0 with the initial retention period lasting until t1 (lines 3-6).

**(B) after expiration of at least some of the retention period, determining if a specified event has occurred**, in par. 108 and fig. 3, time t1 where the a snapshot is taken of the most current object. The "event" is the object being superseded (overwritten);

**(C) when it is determined in the act (B) that the specified event has not occurred, extending the retention period for the unit of data**, in par. 108, where it describes that if the object has not been superseded(overwritten), a snapshot is taken of the original object. This extends the period of that object for at least the length of time until the next snapshot is taken (par. 109); and

**(D) repeating the acts (B) and (C) until it is determined in the act (B) that the specified event has occurred**, in par. 108 and fig. 3. It is disclosed in par. 108 that the version a1 is retained as it remains current for all three snapshots. In contrast, b1 is only current in the snapshot at t1 until the "event" occurs and b2 supersedes b1. Also, c1 is retained at the t1 snapshot, then the steps (B) and (C) of the claim are repeated and is extended at time t2, before the "event" occurs and c2 supersedes c1 at time t3.

5. With respect to claim 3, Margolus et al. teach **the method of claim 1, wherein the method is for retaining the unit of data for a specified period after the occurrence of an event, and wherein the method further comprises an act of:**

**(E) when it is determined in the act (B) that the specified event has occurred, extending the retention period for the unit of data for a length of time associated with the specified period after the occurrence of the event**, in par. 100

Art Unit: 2186

which describes that an expiration time is assigned when a version is superseded (the "event").

6. With respect to claim 3, Margolus et al. teach **the method of claim 1, wherein the method is for retaining the unit of data for a specified period after the occurrence of an event, and wherein the method further comprises an act of:**

**(E) when it is determined in the act (B) that the specified event has occurred, extending the retention period for the unit of data so that the retention period expires the specified period after the occurrence of the event, in par. 100** which describes that an expiration time is assigned when a version is superseded (the "event").

7. With respect to claim 4, Margolus et al. teach **the method of claim 2, wherein the act (C) further comprises an act of:**

**(C1) extending the retention period for the unit of data for an extended period that is less than or equal to the specified period for the unit of data to be retained after the occurrence of the event, in par. 117.**

8. With respect to claim 5, Margolus et al. teach **the method of claim 4, wherein the act (D) comprises an act of, each time the act (C) is performed, extending the retention period by a same length of time, in par. 105.**

9. With respect to claim 6, Margolus et al. teach **the method of claim 1, wherein the at least one storage system stores at least two different types of units of data including a blob of data and a content descriptor file (CDF), each blob having at least one corresponding CDF that includes metadata relating to the blob, wherein**

Art Unit: 2186

**a retention period of a blob is the retention period of its corresponding at least one CDF, wherein the unit of data is a blob, wherein the act (A) comprises establishing the retention period in a first CDF that corresponds to the blob, and wherein the act (C) further comprises:**

**creating a second CDF that corresponds to the blob and has a retention period that expires after the retention period of the first CDF, in par. 99 where the examiner is equating the "datablock" of Margolus with the "blob" of the claim, and the "metablock" of Margolus with the "CDF" of the claim.**

10. With respect to claim 7, Margolus et al. teach **a method of ensuring that a unit of data, stored on a computer system, is retained until a specified period after the occurrence of an event, the computer system comprising at least one host and at least one storage system that stores the unit of data, the method comprising acts of:**

(A) **establishing an initial retention period for the unit of data, wherein the initial retention period is less than or equal to the specified period, in par. 108 which describes fig. 3. The objects a, b, c and d are stored at time t0 with the initial retention period lasting until t1 (lines 3-6).**

(B) **after the expiration of at least some of the initial retention period, determining whether the specified event has occurred, in par. 108 and fig. 3, time t1 where the a snapshot is taken of the most current object. The "event" is the object being superseded (overwritten);**

Art Unit: 2186

**(C) when it is determined in the act (B) that the specified event has not occurred, performing acts of:**

**(C1) extending the retention period for the unit of data for an extended period that is less than or equal to the specified period, in par. 117; and**

**(C2) after the expiration of at least some of the extended retention period, determining whether the specified event has occurred and when the specified event has not occurred, returning to the act (C1), and when the specified event has occurred, proceeding to the act (D), in par. 108, where it describes that if the object has not been superseded(overwritten), a snapshot is taken of the original object. This extends the period of that object for at least the length of time until the next snapshot is taken (par. 109); and**

**(D) when it is determined in either of the acts (B) or (C2) that the specified event has occurred at a time, extending the retention period so that the retention period expires the specified period after the time at which the event occurred, par. 108 and fig. 3. It is disclosed in par. 108 that the version a1 is retained as it remains current for all three snapshots. In contrast, b1 is only current in the snapshot at t1 until the "event" occurs and b2 supersedes b1. Also, c1 is retained at the t1 snapshot, then the steps (B) and (C) of the claim are repeated and is extended at time t2, before the "event" occurs and c2 supersedes c1 at time t3.**

Art Unit: 2186

11. With respect to claims 8-13, Applicant claims a computer readable medium encoded with instructions that perform the method of claims 1-6, and is therefore rejected using similar logic.

12. With respect to claim 14, Applicant claims a computer readable medium encoded with instructions that perform the method of claim 7, and is therefore rejected using similar logic.

13. With respect to claims 15-20, Applicant claims a host computer for use in a computer system that includes the host computer and at least one storage system, the host computer comprising means for performing the method of claims 1-6, and is therefore rejected using similar logic.

14. With respect to claim 21, Hochberg et al. teach the host computer of claim 15, in combination with the at least one storage system, in fig. 1, where the storage system is Archival Storage 4.

### ***Conclusion***

15. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach similar event driven data retention systems.

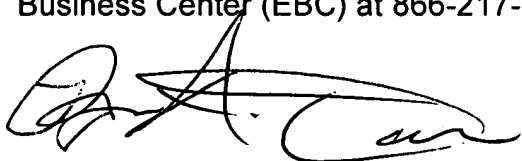
16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Dare whose telephone number is (571)272-4069. The examiner can normally be reached on Mon-Fri 9:30-6.



Art Unit: 2186

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on (571)272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ryan A. Dare  
January 11, 2007



MATTHEW KIM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100